



EUROPEAN UNION



EU MISSIONS

RESTORE OUR OCEAN & WATERS

Concrete solutions for our greatest challenges

Régénérer notre océan et nos eaux

Ministère de l'Enseignement Supérieur et de la Recherche, Paris 30 Janvier 2024

#EUmissions #HorizonEU #MissionOcean

Elisabetta Balzi,
Head of Unit, Ocean, Seas and Waters
Deputy Director, Healthy Planet
European Commission, DG RTD

“Every problem is an opportunity for innovation.

But we need a clear and ambitious objective.

We need a mission, like the European Green Deal.

That is why we have launched the ‘Mission to Restore our Ocean and Waters by 2030’.

With EUR 0.5 billion in funding from the world's largest research and development programme, Horizon Europe, and other instruments.“

President von der Leyen at the One Ocean Summit , 11 Feb 2022





Mission Restore our Ocean and Waters by 2030

a systemic approach for the hydrosphere

Mission Board Starfish Report (2020)

Proposed Mission:
**Mission Starfish 2030:
Restore our Ocean
and Waters**

Report of the Mission Board
Healthy Oceans, Seas, Coastal and Inland Waters

Independent
Expert
Report

FILLING THE KNOWLEDGE AND EMOTIONAL GAP

RESTORE OUR OCEAN AND WATERS

REGENERATING MARINE AND FRESHWATER ECOSYSTEMS

RECARBONISING OUR OCEAN, SEAS AND WATERS

ZERO POLLUTION

REVAMPING GOVERNANCE

EC Com 2021

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on

European Missions

Research and Innovation

Implementation Plan

European Missions

Restore our Ocean and Waters by 2030

Implementation Plan

Research and Innovation

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EC Com 2023

EUROPEAN COMMISSION

Brussels, 19.7.2023
COM(2023) 457 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

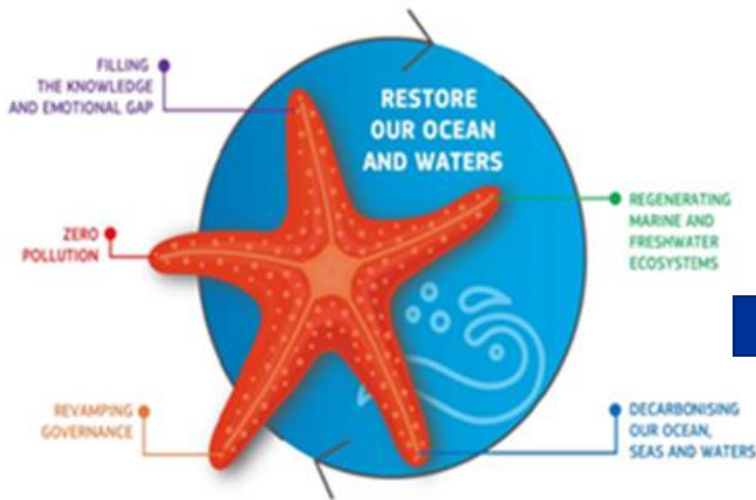
EU Missions two years on: assessment of progress and way forward

{SWD(2023) 260 final}



Starfish Report → Mission Restore our Ocean and Waters

Restore our ocean and waters by 2030



Protect & restore ecosystems and biodiversity

Prevent & eliminate pollution

Make Blue Economy carbon neutral and circular

Digital ocean and water knowledge system
Public mobilization & engagement



Mission objectives and targets

Restore our Ocean and Waters by 2030

PROTECT AND RESTORE MARINE AND FRESHWATERS ECOSYSTEMS AND BIODIVERSITY

- Protect at least 30% and strictly protect 10% EU's sea areas
- Restore 25.000 km free flowing rivers
- Marine nature restoration targets (incl. degraded seabeds, coastal ecosystems)

PREVENT AND ELIMINATE POLLUTION OF OUR OCEANS, SEAS AND WATERS

- Reduce by at least 50% plastic litter
- Reduce by at least 30% microplastics
- Reduce by at least 50% nutrient losses, chemical pesticides

MAKE THE BLUE ECONOMY CARBON- NEUTRAL AND CIRCULAR

- Net zero maritime emissions
- Zero carbon aquaculture,
- Low carbon multipurpose use of marine space

ENABLERS

Digital Ocean and Waters Knowledge system

Public mobilization and engagement



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Mission lighthouses:

sites to pilot, demonstrate, develop and deploy the Mission activities across EU seas and river basins



Baltic & North sea basin



MAKE THE BLUE ECONOMY CARBON-NEUTRAL AND CIRCULAR

Mediterranean sea basin



PREVENT AND ELIMINATE POLLUTION OF OUR OCEAN, SEAS AND WATERS

Danube river basin



PROTECT AND RESTORE MARINE AND FRESHWATERS ECOSYSTEMS AND BIODIVERSITY

Atlantic & Arctic coast





Synergies – Teaming up beyond EC / HE level

Across different EU Programmes

Horizon Europe, EMFAF, Life, Inter-Reg, InvestEU, EIB, Recovery and Resilience Funds

With Member States and Regions

National and regional programmes / initiatives, partnerships

With International partners / initiatives

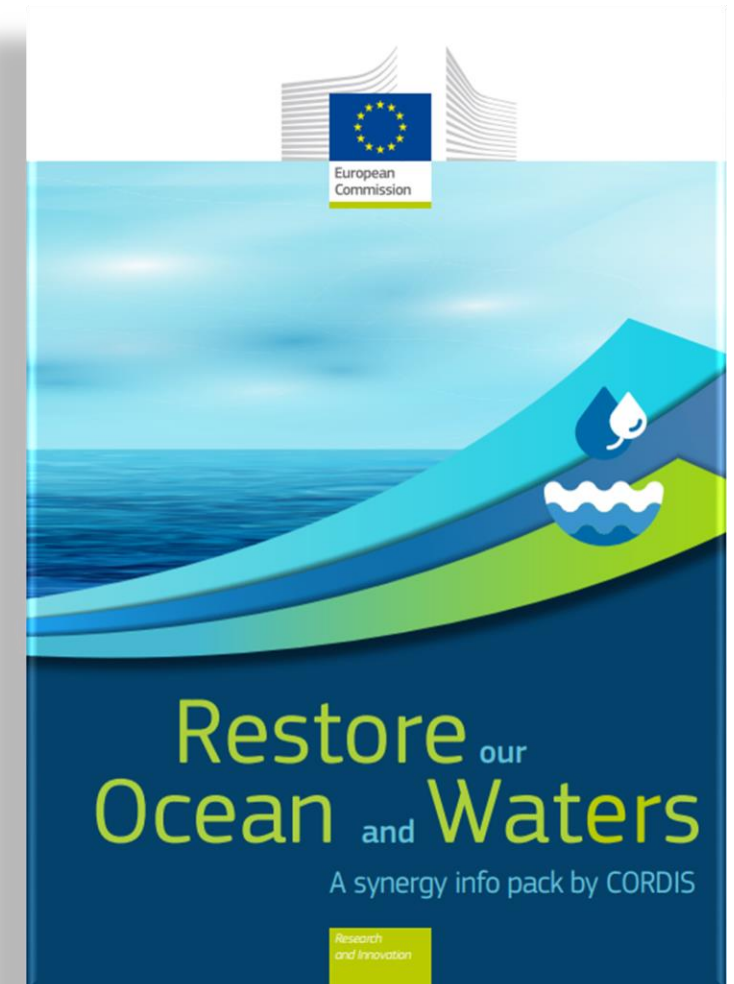
UN Decade Ocean Sciences, UfM, Alliances (e.g. AAORA)

With public & private sectors, and investors

Universities, Joint Undertakings, EIB, EBRD, philanthropy

With citizens and youth

Citizens initiatives, EU4Ocean, Youth ocean Ambassadors





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RESTORE OUR OCEAN & WATERS



POLITICAL BUY-IN

EUROPEAN UNION
DANUBE LIGHTHOUSE

Danube high level event: 3-4 April, Bucharest



Sebastian-Ioan Burduja
Romanian Minister of Research,
Innovation and Digitalization



Mr Sebastian-Ioan Burduja,
Minister for Research, Innovation
and Digitization

10

EUROPEAN UNION
ATLANTIC & ARCTIC LIGHTHOUSE

Atlantic-Arctic lighthouse: 23-24 Nov.
2022, Cork



Simon Coveney
Minister for Foreign Affairs

Michael D. Higgins,
President of Ireland



10

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BALTIC AND NORTH SEA LIGHTHOUSE

Hamburg, 25-26 April 2023



Judith Pirscher
State Secretary Federal
Ministry of Education and Research

EUROPEAN UNION
MEDITERRANEAN SEA LIGHTHOUSE

Marseille, 14-15 June 2022



Maria Cristina Messa
Italian Minister for Universities and Research

Palermo, 30-21 May 2023



12



Coalition of cities & regions



Coalition of islands



Nello Musumeci, Minister for Civil
Protection and Sea Policies, Italy

13



Mission Ocean & Waters: an ever-growing interest

15 Member States

Belgium, Denmark, Estonia, Finland, **France**, Germany, Ireland, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Spain

supported the Mission through **political statement and by endorsing the Mission Charter.**





Charter ACTIONS – NATIONAL AUTHORITIES

- **FR Secretariat General de la Mer**

[Comités France Maritime et Océans Méditerranée - European Commission \(europa.eu\)](#)

[Comités France Maritime et Océans - European Commission \(europa.eu\)](#)

- **DE Federal Ministry of Research and Education**

[DAM pilot missions: MGF North Sea and MGF Baltic Sea - European Commission \(europa.eu\)](#)

[DAM Research Mission: sustainMare - European Commission \(europa.eu\)](#)

[DAM Research Mission: CDRmare - European Commission \(europa.eu\)](#)

[Oceans under Stress - Analysis of Marine CO2 Uptake Capacity - European Commission \(europa.eu\)](#)

[Research programme KüNO III: Coasts in Transition - European Commission \(europa.eu\)](#)

- **FI Ministry of the Environment**

[Water protection programme - European Commission \(europa.eu\)](#)

[Inventory Programme for Underwater Marine Diversity, Velmu - European Commission \(europa.eu\)](#)

[Sustainability of the coast - Finnish Coastal Strategy - European Commission \(europa.eu\)](#)

- **LV Ministry of Environmental Protection and Regional Development of the Republic of Latvia**

[Fostering integrated governance in the near shore zone - European Commission \(europa.eu\)](#)





Charter ACTIONS – NATIONAL AUTHORITIES



- **ET Estonian Ministry of Rural Affairs**
[Open Fishing Port Day - European Commission \(europa.eu\)](#)
- **ES Ministry of Environment and Territory of the Balearic Islands**
[Posidonia conservation in Balearic Islands and a Med Network - European Commission \(europa.eu\)](#)
- **IE Uisce Éireann (National Public Waters Authority)**
[Upgrade national wastewater treatment infrastructure - European Commission \(europa.eu\)](#)
- **LT Lithuanian Inland Waterways Authority**
[Electric cargo transportation by inland waterways of LT - European Commission \(europa.eu\)](#)



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MISSION CHARTER



MISSION CHARTER – Mobilising Communities



The Mission Charter is meant to **mobilise** all stakeholders to achieve the goals of the Mission, strengthening **cooperation**, aligning **efforts** and achieving **critical mass** for the transformational **change** needed to restore our oceans and waters by 2030.

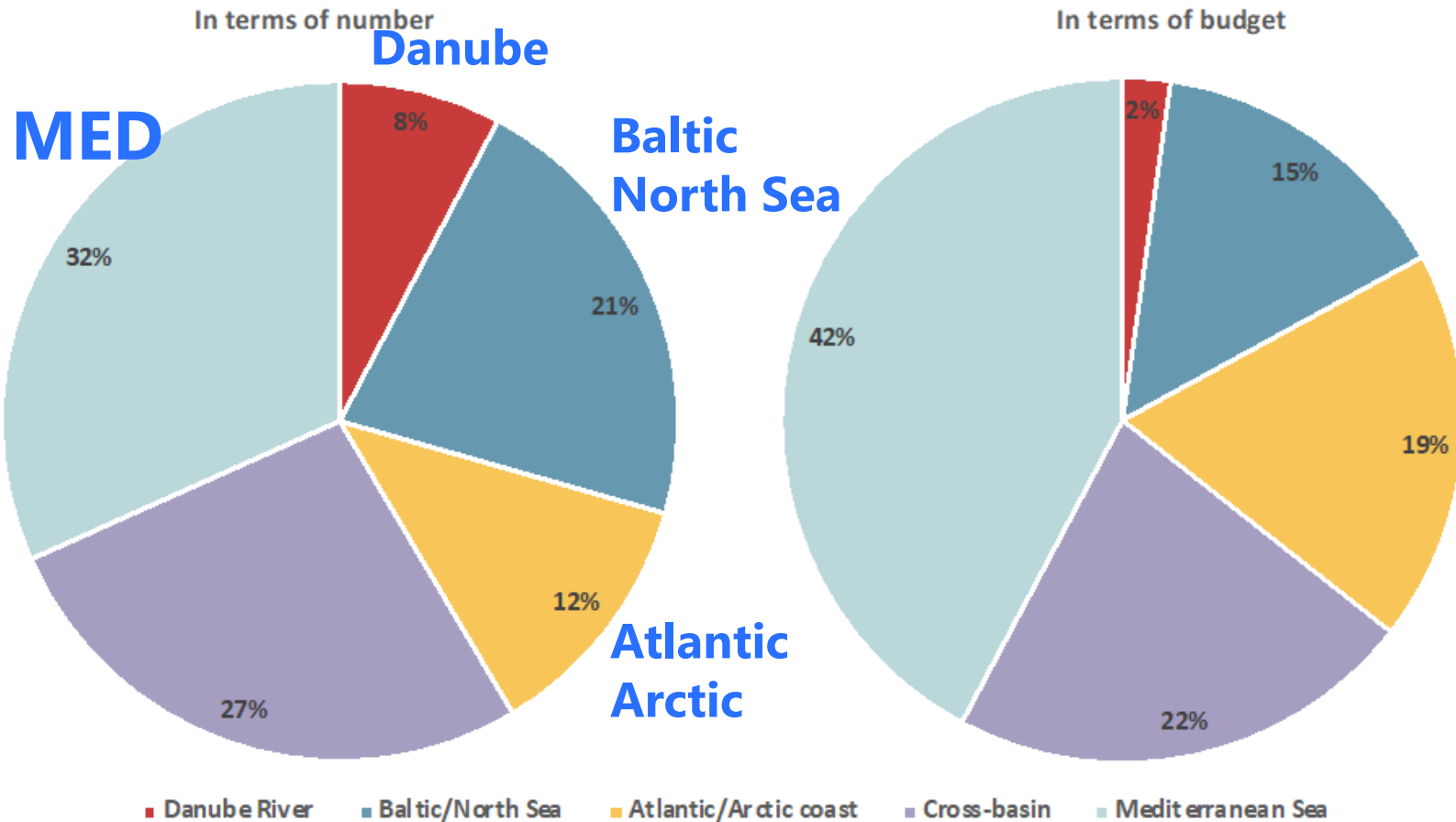
[The Charter for the Mission "Restore our Ocean and Waters by 2030" \(europa.eu\)](https://europa.eu)
[EUSurvey - Survey \(europa.eu\)](#)





Mission Charter actions

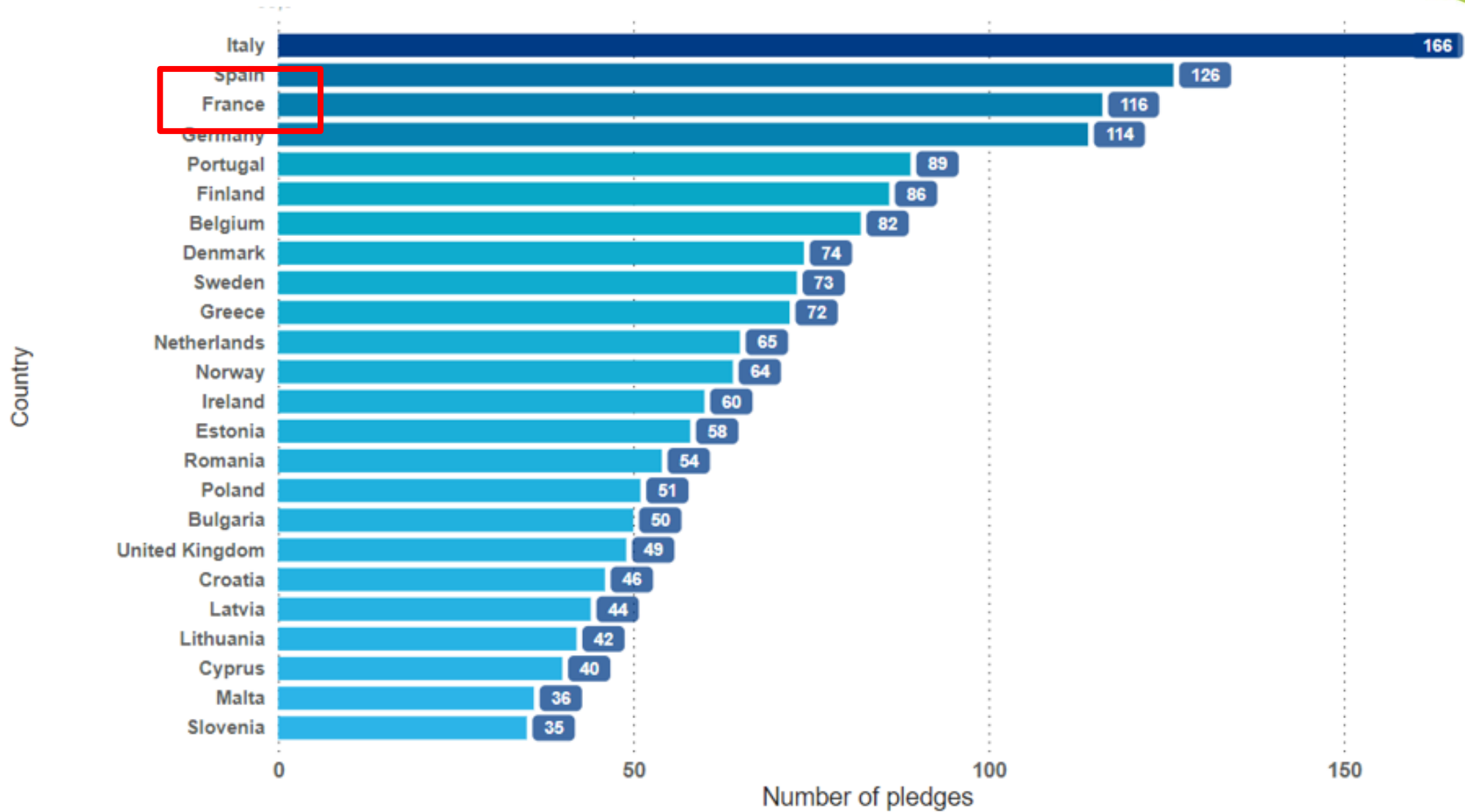
Percentage of Pledges by Basin
(Accepted pledges as of September '23)



Over 550 actions submitted with 457 actions accepted and visible to the Mission Atlas
Budget mobilised: €4,28 billion



Mission Charter actions





FRENCH SUBMISSIONS TO THE CHARTER

Layers (1) Legend

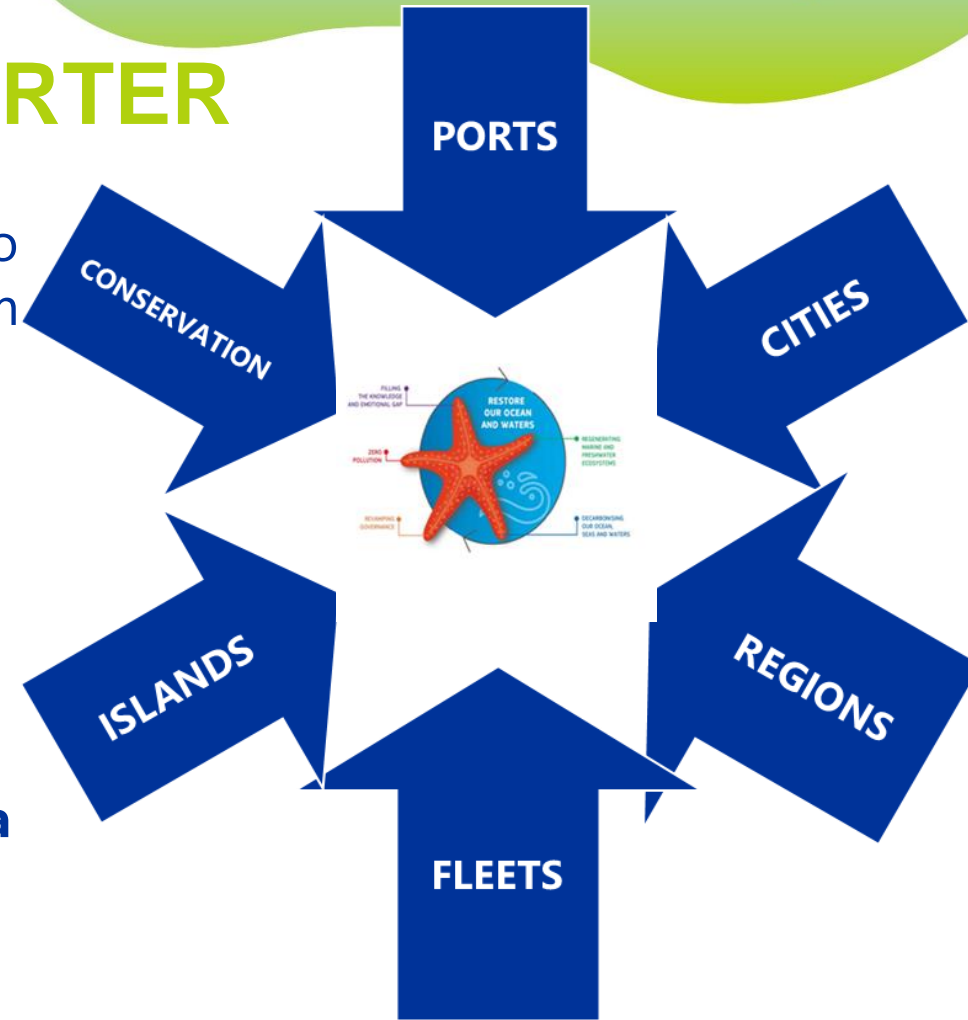
Mission Actions - EU Mission Restore our Ocean and Waters
Year: 2023

- Research and innovation
- Evidence-based knowledge and data
- Upscaling, deployment and replication of solutions
- Citizen engagement, outreach, awareness raising
- Education and training



116 actions submitted to the Mission Charter from French actors, of which:

- national authorities
- region
- city
- islands
- Port and fleets
- Research & academia
- Private enterprises
- MPAs
- NGOs
- ...





FR - Charter: NATIONAL AUTHORITIES

Secrétaire Général de la Mer

Mission Actions - EU Mission Restore our Ocean and Waters (2 of 7)


Premier ministre

Secrétariat général de la mer

Title of the action: **Comités France Maritime et Océans Méditerranée**

Short description: **The General Secretariat for the Sea (SGMer) by Prime Minister decision, is in charge to lead and coordinate the development of the Government's marit... [see more info](#)**

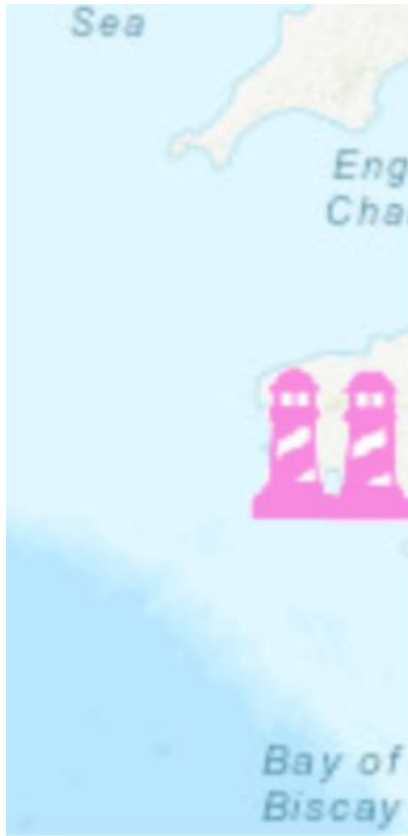


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FR - Charter: REGIONS

Région Sud

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Title of the action: **Call for projects: for a Zero Plastic Waste**

Mediterranean

Short description: **The approach taken is based on two principles: 1 Exploiting all the resources of regional competences: the Region relies on its various lead departmen... [see more info](#)**

Name of organisation: **Region Sud**

Budget: **2.954 Million Euro**



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FR - Charter: CITIES Brest metropole



Title of the action: **Preventing Plastic Pollution (PPP)**
Short description: **Globally, about 80% of plastic pollution comes from terrestrial sources (GESAMP, 2016) and approximately 4 million tonnes of plastic waste enter the s... see more info**

Name of organisation: **Preventing Plastic Pollution (PPP)**

Project

Budget: **14.3 Million Euro**



Title of the action: **Ocean Hackathon**

Short description: **Ocean Hackathon® is a non-stop, 48-hour event during which teams develop a prototype and reflect on its use. This must be based on marine data. A call... see more info**

Name of organisation: **Technopôle Brest-Iroise**

Budget: **0.042 Million Euro**

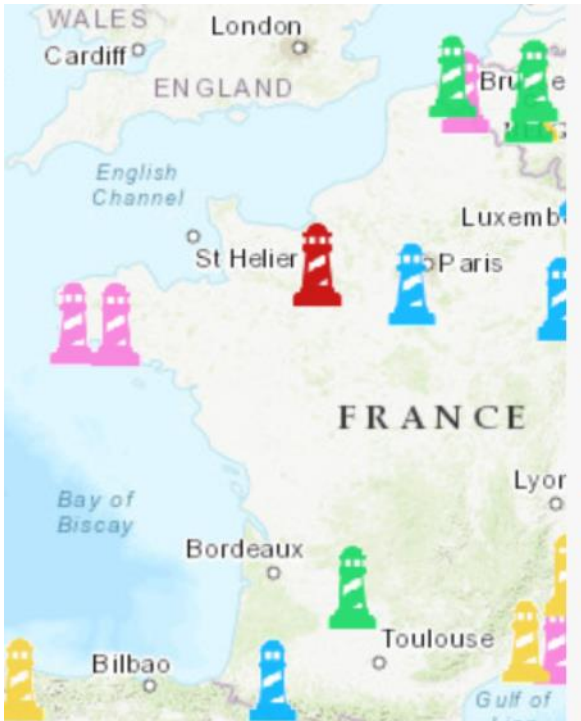
TerraRade Action programm (Brest Harbor)





FR - Charter

Citizens engagement actions



Title of the action: **Quiz: OCEAN 2150, what if all went fine?**
Short description: **The aim of the quiz is to inform the visitors of Nausicaa aquarium about the role and importance of nature-based solutions to adapt to and to mitigate... [see more info](#)**
Name of organisation: **Nausicaa, Centre National de la Mer**
Budget: **0.01 Million Euro**



BRETAGNE ATLANTIQUE

Title of the action: **Developping innovative & collaborative projects in Maritime**
Short description: **Pôle Mer Bretagne Atlantique (PMBA) is a sea innovation cluster that manages a network of more than 420 organisations on a triple helix approach in wh... [see more info](#)**
Name of organisation: **Pôle Mer Bretagne Atlantique**
Budget: **2.259 Million Euro**



FR - Charter: ISLANDS

Saint Honorat – Blue Mission Island award



Title of the action: **Valorization of non-organic waste on Saint-Honorat Island**

Short description: **Saint-Honorat, is a private island in Cannes'bay owned by the Lérins Abbey. Twenty monks live there permanently and welcome around 100 000 visitors pe... [see more info](#)**

Name of organisation: **CCIC Abbaye de Lérins**

Budget: **0.022 Million Euro**



FR - Charter: ISLANDS MED WAVES and BeMed-Islands (SMILO)



Title of the action: **BeMed-Islands capitalisation process**

Short description: • **Promoting the collaboration among BeMed projects and beyond, and particularly by facilitating the application of existing harmonized approaches and ...**
[see more info](#)

Name of organisation: **MedWaves - Catalan Waste Agency**

Budget: **0.1096 Million Euro**



FR - Charter: MPAs

Marine Protected Areas



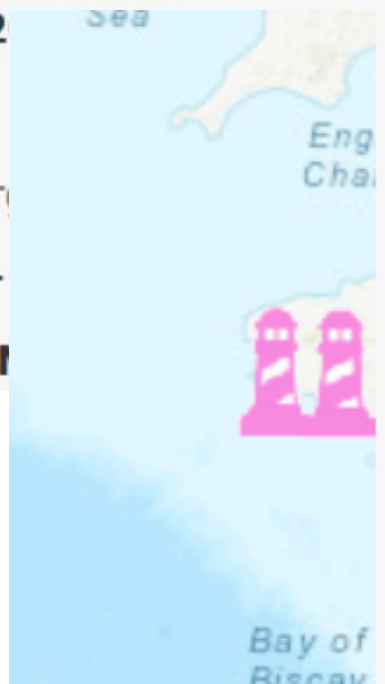
Title of the action: **Building a strong community of practice for a healthy Mediterranean**

Short description: **MedPAN is an operational network ideally positioned to ensure the on-the-ground implementation of**

the Post 2020
[more info](#)

Name of organisation: **Network -**

Budget: 2 M



Title of the action: **Creation of a protected marine area on the Cote Basque**

Short description: **Summary: The project aims, on the South Atlantic coast of the Basque Country, to restore biodiversity and ultimately fishery resources and to trigger ... [see more info](#)**

Name of organisation: **Sepanso 64 (member of FNE)**

Budget: **0.35 Million Euro**



FR - Charter: PORTS Port Fréjus



Title of the action: **Artificial habitats with ecological connectivity**

Short description: **Ecocean implements green catering solutions. The company follows a functionality economy and circular economy model. Ecocean has created a product cal... [see more info](#)**

Name of organisation: **Ecocean**

Budget: **0.167 Million Euro**



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FR - Charter: Research & Academia

IFREMER

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Title of the action: **Ocean & Climate priority research programme**

Short description: **This programme has two major objectives. The first one is to support the transition from disciplinary research on the ocean (physics, biology, econom... [see more info](#)**

Name of organisation: **Institut français de recherche pour l'exploitation de la mer (Ifremer)**

Budget: **40 Million Euro**



Mission Actions - EU Mission Restore our Ocean and Waters (6 of 7)



Title of the action: **Phenomer, Phytoplankton Citizen Science**

Short description: **Since the summer of 2013, a multidisciplinary team coordinated by Ifremer has enlisted the help of the general public to report any unusual phenomena ... [see more info](#)**

Name of organisation: **IFREMER**

Budget: **0.005 Million Euro**

End date of action: **31/12/2025**



FR - Charter: Research & Academia Marseille University



Title of the action: **The Mediterranean, the sea as a future**
Short description: **The Science and Arts Festival of the University of Aix Marseille, launch of the University of the sea: This Science and Arts festival gathers academi... [see more info](#)**
Name of organisation: **Aix-Marseille University**

European Universities of the Seas - University of Western Brittany



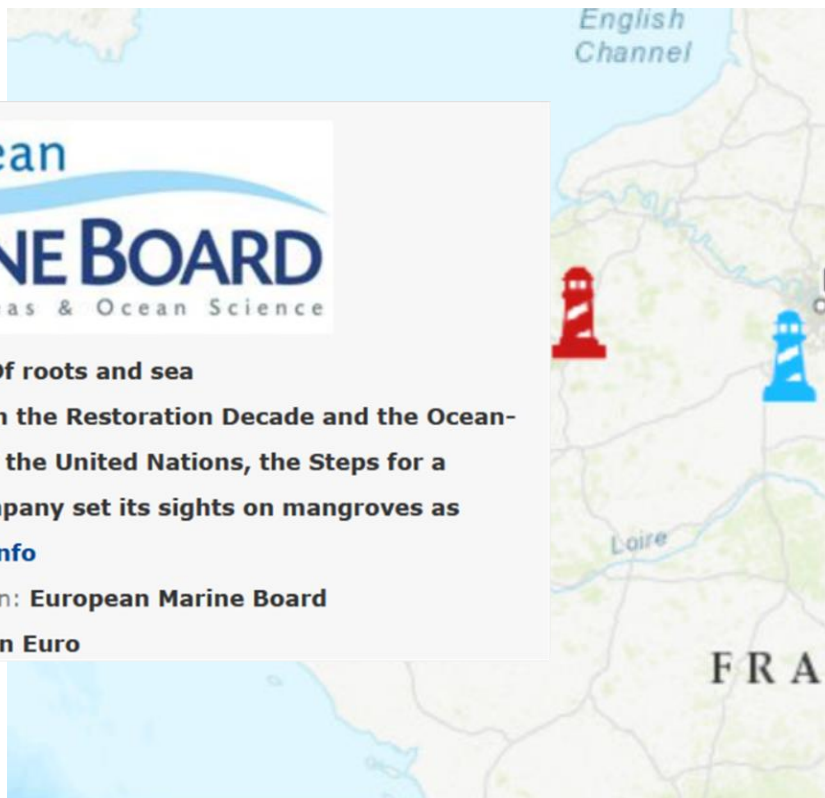
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FR - Charter: Research & Academia Research associations

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Title of the action: **Of roots and sea**
 Short description: **In the Restoration Decade and the Ocean-Science Decade of the United Nations, the Steps for a change dance company set its sights on mangroves as majo... [see more info](#)**
 Name of organisation: **European Marine Board**
 Budget: **0.01 Million Euro**



Title of the action: **EuroMarine Individual Fellowship Programme**
 Short description: **EuroMarine is a European marine research network that funds scientific, foresight and training activities, and fosters new services relevant to the ma... [see more info](#)**
 Name of organisation: **Association EuroMarine**
 Budget: **0.012 Million Euro**



FR - Charter: Research Fleets and Foundations

TARA OCEAN



Mission Actions - EU Mission Restore our Ocean and Waters (1 of 9)

Fondation **tara océan**
explorer et partager

Title of the action: **TARA POLAR STATION**

Short description: **The Arctic Ocean is a remote and extreme environment, of which we know little about. It is unknown how the organisms living there cope with the extre... see more info**

Name of organisation: **Tara Ocean Foundation**

Budget: **17 Million Euro**

End date of action: **20/06/2027**

Website



FR - Charter: Non-Governmental Organisation



Title of the action: **Eco-citizen operations (pollution clean-up), awareness child**

Short description: **The organisation has 45 branches around the world. Its national and international development allows it to provide expertise to associations and citiz...**

[see more info](#)

Name of organisation: **Project Rescue Ocean**

Budget: **0.03 Million Euro**



BLUE PRINT
BY OCEAN AS COMMON

Title of the action: **Blue Print**

Short description: **Blue Print is a project that has been initiated in 2021 as a pilot project in a specific territory in the region of Brittany (France), Auray Quiberon ...**

[see more info](#)

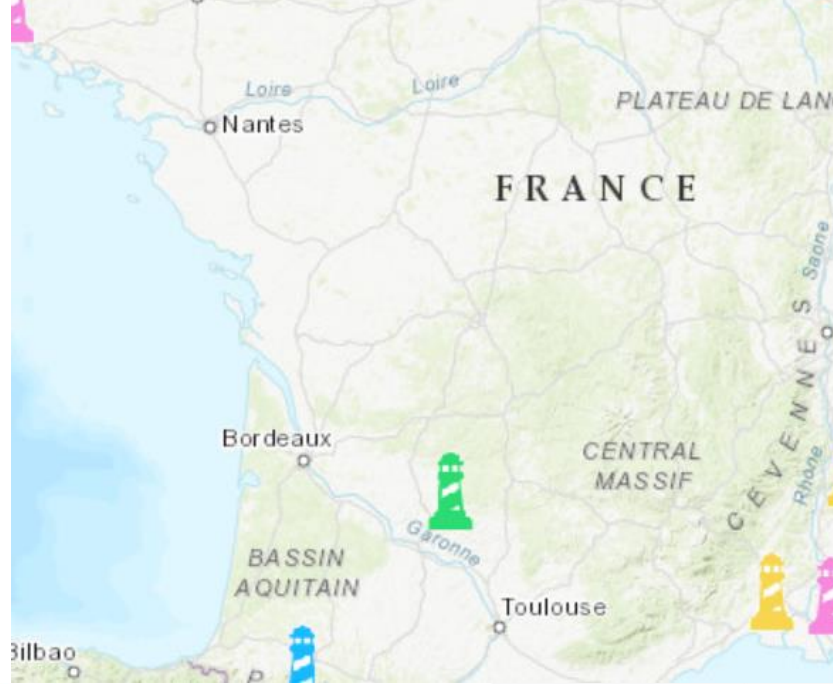
Name of organisation: **Innovations Bleues**

Budget: **0.1 Million Euro**



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FR - Charter: EU / international projects



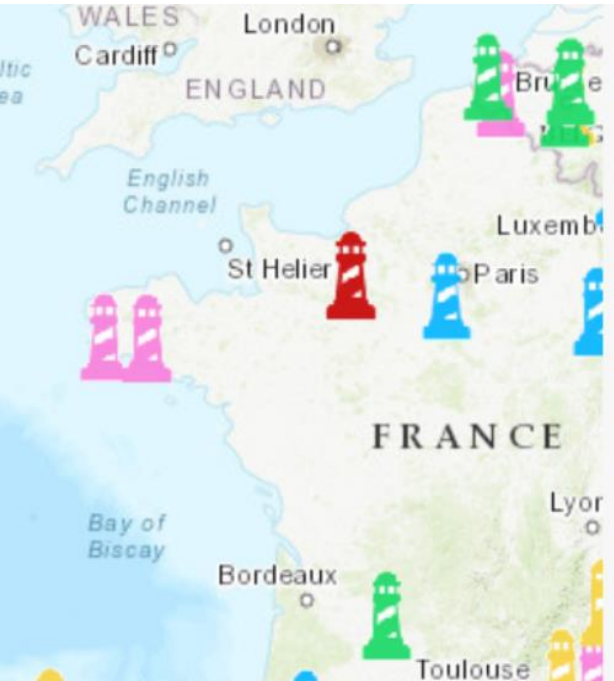
Title of the action: **SeaMark project**

Short description: **Scaling up cultivation and processing of macroalgae in a cascading biorefinery concept to attract commercial investments, while monitoring ecosystem s...**

[see more info](#)

Name of organisation: **SUBMARINER Network for Blue Growth EEIG**

Budget: **10.12 Million Euro**



Title of the action: **MARine COastal BiODiversity Long-term Observations**

Short description: **MARCO-BOLO (MBO) aims to structure and strengthen European coastal and marine biodiversity observation capabilities, linking them to global efforts to...**

[see more info](#)

Name of organisation: **EMBRC-ERIC**

Budget: **7.255 Million Euro**



BIOcean5D

Title of the action: **BIOcean5D**

Short description: **BIOcean5D is an EU-funded research project with contributions from UK and Swiss government, with the ambitious goal to generate the data, knowledge, m... [see more info](#)**

Name of organisation: **EMBL - European Molecular Biology Laboratory**

Budget: **17.2 Million Euro**





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FR - Charter: Private enterprises



Title of the action: **BBI-JU Flagship SCALE project**
Short description: **SCALE for Supplying Bioactive Compounds from microalgae to foster a blue future. The system is seriously challenged by evolving**
[more info](#)

Name of organisation: **Microphyt**
Budget: **24.5 Million Euro**



Title of the action: **Water Recycling Eco Toilets for Maritime (ports and ships)**

Short description: **WRETs treat and recycle on-site the blackwater from the toilets into treated water for flushing, in ports and ships with compact plug & play technology... [see more info](#)**

Name of organisation: **WeCo Toilet**



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FR - Charter: Private enterprises

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Title of the action: **Sustainable production and biorefinery of brown seaweed**

Short description: **the goal of the actions are to produce on long lines brown seaweed saccharina latissima on a sustainable high carbon dioxide absorption approach and ... see more info**

Name of organisation: **ALGAIA**

Budget: **7 Million Euro**



Title of the action: **Development of aid-decision tools in physical oceanography**

Short description: **Modelling drift of objects at sea as pollutions, plastics, hydrocarbon... We have developed a web platform aimed at forecasting object drifts, in coas... see more info**

Name of organisation: **Actimar**

Budget: **0.4775 Million Euro**





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FR - Charter: Private enterprises

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Title of the action: **BLUEFINS, a whale fin for less energy-consuming boats**

Short description: **Problem and results : - Commercial vessels, consumers of heavy fuel oil, have undertaken to reduce their greenhouse gas emissions. - The "fin" devel... [see more info](#)**

Name of organisation: **Bluefins**

Budget: **4 Million Euro**



CLS

COLLECTE LOCALISATION SATELLITES

Title of the action: **Sea level, wave & multi-observation for Copernicus Marine**

Short description: **CLS is deeply involved in the activities of the Copernicus Marine Service among 3 of 8 of its Thematic Assembly Center (TAC) : • SL TAC (Sea Level Th... [see more info](#)**

Name of organisation: **CLS**

Budget: **5.25 Million Euro**





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HORIZON EUROPE MISSION CALLS and PROJECTS



HE: Mission Ocean Work Programmes & Calls

2021

CALL - EUR 114 million for calls for proposals
20 projects on-going
EUR 116 million EU funding (EUR 123 M€ total project cost)

2022

CALL - EUR 116 million for calls for proposals
20 projects ongoing
EUR 118,4 million funding (EUR 130 M€ total project cost)

2023

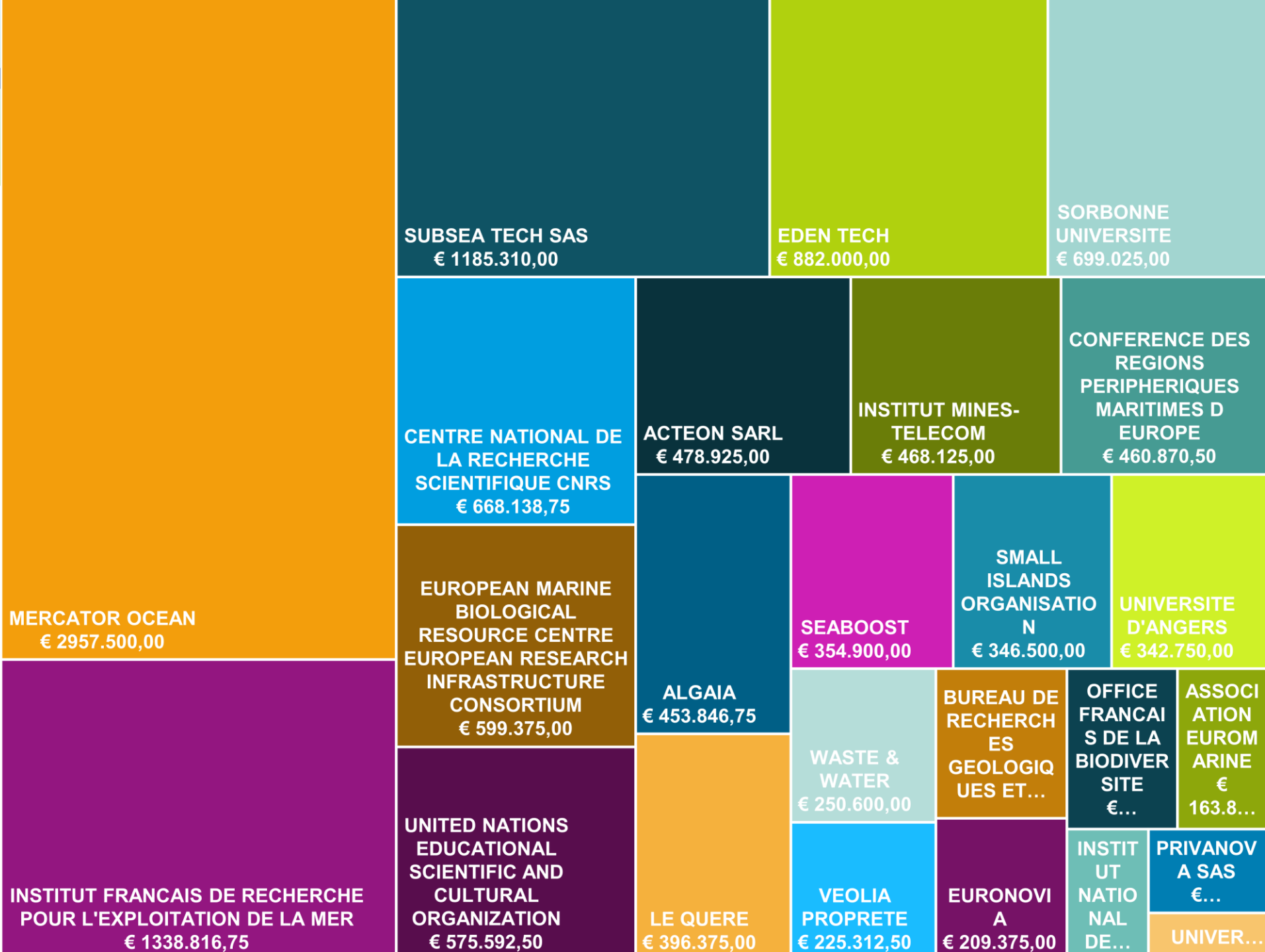
CALL – EUR 110 million for calls for proposals
26 projects recommended for funding
EUR 119 million funding



EUROPEAN UNIO

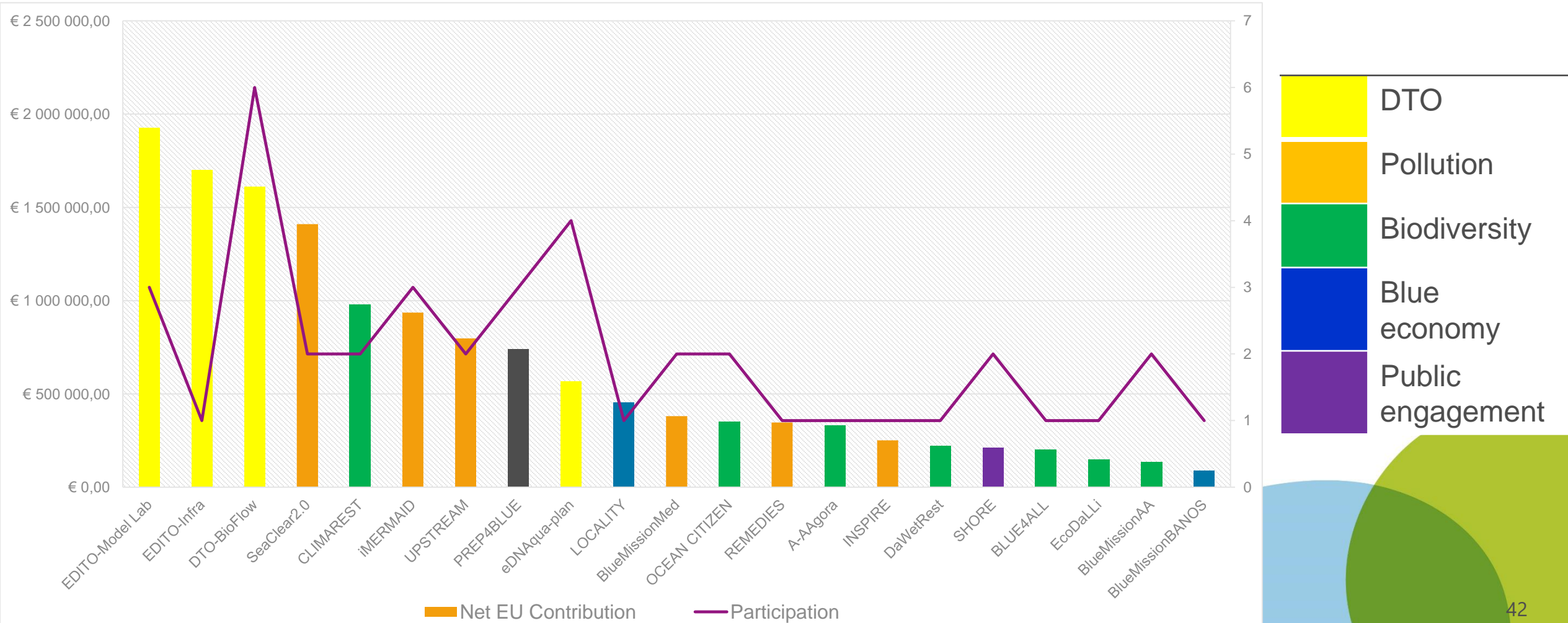
France: 26 participants in 21 (out of 40) Mission projects from HE calls 2021 and 2022

Diagram depicts the volume of funding to individual participants.





France participation





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Overview of Mission projects 2021-22 with FR participation



Danube lighthouse

Portfolio of projects



2021

Lighthouse CSA - 3M€

EcoDaLLi - ECOsystem-based governance with DANube lighthouse Living Lab for sustainable Innovation processes

**Restoration of fresh & transitional waters ecosystems
IA - 17M€**

**DANUBE4all
DALIA**

2022

**Protection & restoration of wetlands, flood plains, coastal wetlands & salt marshes and their biodiversity
IA - 17M€**

DaWetRest- Danube Wetlands and flood plains Restoration through systemic, community engaged and sustainable innovative actions
Restore4Life



2023

**Demonstration of effective and sustainable management of sediments
IA - 17M€**



Atlantic and Arctic lighthouse

Portfolio of projects

2021
2022
2023

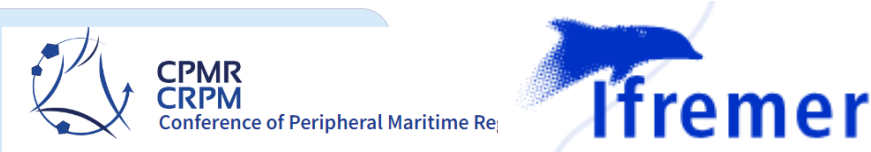
Restoration of marine and coastal ecosystems and increased climate resilience
IA - 17M€

CLIMAREST - Coastal Climate Resilience and Marine Restoration Tools for the Arctic Atlantic basin
A-Agora - Blueprint for Atlantic-Arctic Agora on cross-sectoral cooperation for restoration of marine and coastal ecosystems and increased climate resilience through transformative innovation



Lighthouse CSA - 3M€

BlueMissionAA - Building a coordination hub to support the mission implementation in the Atlantic and Arctic basin



(With Mission Climate): demonstration for coastal resilience, IA - 20M€

Addressing climate change and human activities threats to marine biodiversity
IA - 16M€





European Blue Parks

Portfolio of projects

2021

**European Blue Parks
IA - 17M€**

OCEAN CITIZEN - Marine forest coastal restoration: an underwater gardening socio-ecological plan



BLUE4ALL - Blueprint demonstration for co-created effective, efficient and resilient networks of MPAs



2022

**Protection and restoration
solutions for degraded
coastal and marine habitats
IA - 17M€**

**PROTECT BALTIC
EFFECTIVE**

2023

**European blue parks:
Protection and restoration of
marine habitats
IA - 8.8 M€**



Mediterranean lighthouse

Portfolio of projects

2021

Actions to prevent, minimise and remediate litter and plastic pollution
IA – 16M€

SeaClear2.0 - Scalable Full-cycle Marine Litter Remediation in the Mediterranean: Robotic and Participatory Solutions

REMEDIES - Co-creating strong uptake of REMEDIES for the future of our oceans through deploying plastic litter valorisation and prevention pathways



2022

Lighthouse CSA - 3M€

BlueMissionMed - Lighthouse coordinating and supporting the innovation ecosystem for a Healthy Pollution free Mediterranean Sea



2023

Missions Ocean & Soil – Joint demonstration of approaches and solutions to address nutrient pollution in the landscape-river-sea system in the Mediterranean sea basin, IA - 8M€

RHE-MEDIation

iMERMAID- Innovative solutions for Mediterranean Ecosystem Remediation via Monitoring and decontamination from Chemical Pollution





Baltic and North Sea lighthouse

Portfolio of projects

2021
2022
2023

Low impact marine aquaculture and multi-purpose use of marine space, IA – 16M€

ULTFARMS
OLAMUR

Lighthouse CSA - 3M€

BlueMissionBANOS - Supporting the Mission Ocean Lighthouse in the Baltic and North Sea basins



Bringing sustainable algae-based products and solutions to the market IA - 17M€

LOCALITY– Nature-positive aLgae-based fOod, agriCulture, AquacuLture and textlle producTs made in North and Baltic Sea ecosYstems
AlgaePro BANOS



Green, energy-efficient and sustainable small-scale fishing fleets IA- 12M€



2021

Preparation for deployment of lighthouse demonstrators, solution scale ups & citizen & stakeholder involvement, CSA – 5M€

PREP4BLUE - Preparing the Research & Innovation Core for Mission Ocean, Seas & Waters



CPMR

CRPM

Conference of Peripheral Maritime Regions



Objective 1

2023

European natural lakes: demonstration of integrated approaches to protection and restoration of natural lake ecosystems and their biodiversity, IA - 12M€

2023

Mission Climate adaptation, Mission Ocean and Mission Soil – Joint demonstration of an integrated approach to increasing landscape water retention capacity at regional scale, IA - 15M



Objective 2

2022

Prevent and eliminate litter, plastics and microplastics: Innovative solutions for **waste-free European rivers**, IA – 10M€

UPSTREAM- Circular and Bio-Based Solutions for the Ultimate Prevention of Plastics in Rivers Integrated with Elimination And Monitoring Technologies



Le Quéré (S.A.S.)
Complex maritime projets « Blue Territory® »

INSPIRE- Innovative Solutions for Plastic Free European Rivers



2022

Marine litter and pollution – Smart and low environmental impact fishing gears, IA - 10M€

**SEARCULAR
NETTAGPlus**

Objective 3

2023

Nature-inclusive concept design and practices for offshore renewables, RIA – 4.5 M€

2023

Analysis of the obstacles and opportunities for repurposing aged/unused offshore infrastructures, RIA – 1.4 M€



Enabler 1 - Digital Ocean and Waters Knowledge system



2021
2022
2023

Underlying models for the European Digital Twin Ocean, IA - 7M€

EDITO-Model Lab - Underlying models for the European Digital Twin Ocean - EDITO-Model Lab



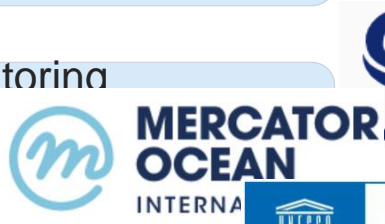
Public Infrastructure for the DTO IA, IBA - 3M€

EDITO-Infra - EU Public Infrastructure for the European Digital Twin Ocean



Integration of biodiversity monitoring data into the DTO, IA - 10M€

DTO-BioFlow - Integration of biodiversity monitoring data into the Digital Twin Ocean
DIGI4ECO



Towards a European e-DNA library of marine and freshwater species
CSA - 2M€

eDNAqua-plan - A Plan towards an eDNA reference library and data repository for Aquatic Organisms, navigating Europe towards the next generation biodiversity monitoring



Integration of socio-ecological models into the Digital Twin Ocean, RIA, 10M€



Roadmap towards the integration of inland waters into the Digital Twin Ocean, CSA - 2M€



Enabler 2 - Public mobilisation and engagement



2021
2022
2023

The relation of young generations with the sea and water: values, expectations, and engagement
RIA - 1M€

FLOW

Piloting citizen science in marine and freshwater domains, CSA - 1M€

OTTERS

Europeanisation of Plastic Pirates Citizen Science Initiative, IBA - 2M€

PlasticPiratesEU

Student and school activities for the promotion of education on 'blue' sustainability and the protection of marine and freshwater ecosystems, CSA - 3M€

SHORE-
SHORE: EmpOweR Students as the agents of cHangE
ProBleu
BlueLightS



Towards local community-driven business models: regenerative ocean farming, CSA - 3M€

C-FAARER
COOL BLUE

Choose your fish: a campaign for responsible consumption of products from the sea, CSA - 2M€

Ocean & water and arts: the contribution of creative sectors to Mission Ocean, CSA - 2M€



EUROPEAN UNION

Example of projects with FR participation



DTO-BioFlow – Integration of biodiversity monitoring data into the Digital Twin Ocean

Enabler 1 - Digital Ocean and Waters Knowledge system

SCOPE

- The DTO-BioFlow project will contribute to the Digital Twin of the Ocean (DTO), an IT replica of the ocean allowing simulation of 'what if' scenarios, advancing ocean knowledge, fostering fact-based policymaking and offering a range of applications in society. Goals of the project include: 1) Replicating the ocean's ecology 2) activating 'sleeping' marine biodiversity data and 3) integrating Artificial Intelligence and automated data flows from various sources.

BUDGET

EU contribution: € 1.609.361,25

Total cost: € 1.673.236,25

FR beneficiaries



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EDITO-Model Lab - Underlying models for the European Digital Twin Ocean

Enabler 1 - Digital Ocean and Waters Knowledge system

SCOPE

- EDITO-Model Lab will prepare the next generation of ocean models, complementary to Copernicus Marine Service to be integrated into the EU public infrastructure of the European Digital Twin Ocean (EDITO) that will ensure access to required input and validation data, and to high-performance and distributed computing facilities. It will be consolidated under developments of Destination Earth (DestinE). As an interactive and user driven initiative, EDITO-Model Lab will deliver a Virtual Ocean Model Lab through a core model suite including global highresolution models and coastal configurations, downstream user toolkits and a developer’s toolkit for a sustainable ocean.
- Jan 2023 – Dec 2025

BUDGET

EU contribution: € 1.924.687,50

Total cost: € 1.924.687,50

FR beneficiaries

- **Coordinator:**





SeaClear2.0 - Scalable Full-cycle Marine Litter Remediation in the Mediterranean: Robotic and Participatory Solutions

Obj. 2 Pollution – Mediterranean Lighthouse

SCOPE

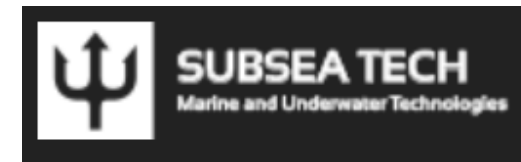
- SeaClear2.0 will develop a holistic approach to address the full cycle of marine litter. The project aims to prevent and reduce marine litter pollution, particularly plastics and microplastics, in the Mediterranean. This will be achieved via community activation and citizen empowerment, scaling up the project's innovative teams of autonomous, intelligent robots for effective monitoring and collection of marine seafloor and surface litter, and the valorisation of the collected litter. The project also aims to Good Environmental Status by providing evidence for new legislation and the implementation of existing rules. SeaClear2.0 impact ranges from the reduction of upstream and beach litter via public awareness and citizen activation; through effective litter monitoring using both robotic mapping and public reporting in a gamified app; to direct collection of at least 57% of existing litter in the areas covered by the robot teams.
- Jan 2023 – Dec 2026

BUDGET

EU contribution: € 1.410.622,50

Total cost: € 2.015.175,00

FR beneficiaries





CLIMAREST - Coastal Climate Resilience and Marine Restoration Tools for the Arctic Atlantic basin

Obj. 1 Biodiversity – Atlantic and Arctic Lighthouse

SCOPE

- CLIMAREST integrates multiple expertise into a holistic approach, to develop a toolbox designed to establish guidelines for ecosystem restoration and to enhance climate resilience in coastal communities. The concept is to develop, test and optimise a modular toolbox that integrates expert knowledge, scientific information, multilevel stakeholder and community involvement, ecosystem service improvement analysis, cost-benefit analysis, priority of actions, and custom designed protocols for restoring and monitoring multiple coastal habitats. The toolbox framework will have common and specific tools that will be tested, optimised and demonstrated in five different ecosystems, across a latitudinal gradient of the Arctic-Atlantic basin, ranging from the high-Arctic Svalbard (79° N) in the North to the Madeira archipelago (33° N) in the South.

- Dec 2022 – Nov 2025

BUDGET

EU contribution: € 977.027,50

Total cost: € 1.129.127,50

FR beneficiaries





EUROPEAN SOLIDARITY CORPS and EU MISSIONS

Contribute to European Green Deal by mobilising young citizens to be active players and vectors of change in climate, environmental and health issues, linked to the goals of the Missions

- **EUR 16.5 million** - Horizon Europe Work Programme 2023
- The amount was entirely distributed to **volunteering activities**
- Contribution agreements with 31 programme countries (27 MS + Iceland, Liechtenstein, North Macedonia and Türkiye.)
- Results: 465 projects for “environmental protection, sustainable development and climate action” + 365 under “projects green practices”.
- **Examples for Mission Ocean and Waters in FR:**



France	Oceans and waters; biodiversity, environmental protection, environmental education, green skills	ASSOCIATION POUR LA MISE EN VALEUR DES RIVIERES ET POUR LES INITIATIVES LOCALES
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France	Oceans and waters; biodiversity, environmental protection, environmental education, green skills	Fondation Tour du Valat, Institut de recherche pour la conservation des zones humides méditerranéennes
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EUROPEAN UNION

MISSION IMPLEMENTATION PLATFORM



Mission Ocean and Waters service portal

Home

Mission Charter

Mission Solutions

Mission funding

Collaboration space

Advisory services

EU Blue Parks

Mission Lighthouses

News & Events

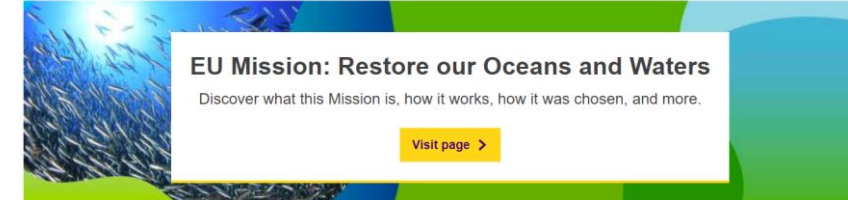
About

Mission Ocean and Waters service portal

One-stop-shop for stakeholders involved and interested in the Mission Ocean implementation.

Mission Ocean projects

These Horizon Europe Mission Ocean-funded projects are part of the drivers to fulfill the Mission goals across all Lighthouses. Discover who they are and the work they do.



Find financing

Find a variety of financial programmes and instruments to finance projects and actions related to ocean conservation and blue economy.

Join the Mission

We provide different opportunities for actors and citizens to support and implement ideas related to ocean and water ecosystem restoration, the prevention and elimination of pollution, and making the sustainable blue economy circular and carbon-neutral.



Endorse the Mission Charter

We are calling on Member States, regions and a wide range of stakeholders to endorse the Mission Charter and pledge actions that will contribute to the successful implementation of Mission Ocean and Waters and its Lighthouses.



Join our Forum

Mission Ocean and Waters will present its progress at a Forum hosted annually in Brussels, allowing online exchanges and networking among the Mission Forum community. Find out more about the event here.



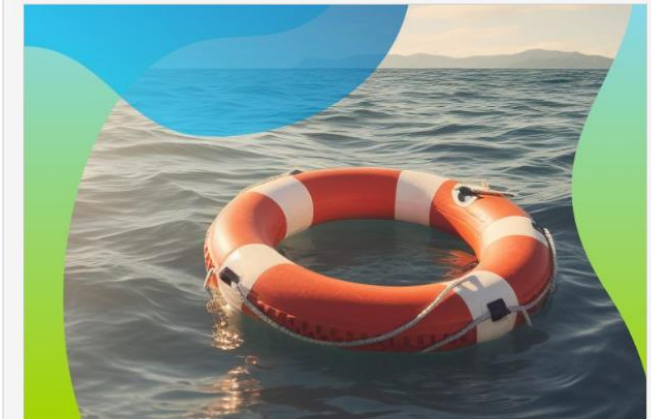
Join the EU Blue Parks Community

Join the EU Blue Parks Community, a collaborative platform for policymakers, researchers, and stakeholders to work together on marine conservation and achieve the goals of the 2030 EU Biodiversity Strategy.



Search for innovative solutions

Find shared knowledge and expertise, fostering collaboration and innovation.



Seek assistance in tailoring your research

Request support in customising your research and connect with solution owners. You can also submit your demand through our helpdesk webform.



Upcoming EVENTS

- Mission Ocean and Waters Forum and matchmaking: Brussels, 4-5 March 2024

[Mission “Restore our Ocean and Waters by 2030” Annual Forum: towards 2030 - European Commission \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/infographic/intermediary/pdf/2023/11/23111101.pdf)

within the European Ocean Days

- UN Ocean Decade Conference, Barcelona, 10-12 April 2024

[2024 Ocean Decade Conference | UNESCO](https://www.unesco.org/en/odc)

- Our Ocean – An Ocean of potential, Athens, 15-17 April 2024

[Our Ocean - An Ocean of Potential \(ourocean2024.gov.gr\)](https://ocean2024.gov.gr)

- Digital Twin Ocean Forum , Brussels 13 June 2024



SPREAD THE NEWS

REGISTRATION IS OPEN

More info

https://maritime-forum.ec.europa.eu/theme/governance/european-ocean-days_en

BRUSSELS

EUROPEAN OCEAN DAYS



EU MISSION RESTORE OUR OCEAN AND WATERS
WHERE NEXT FOR EUROPE'S SEAS?
BLUEINVEST DAY
OCEAN LITERACY IN ACTION



4-8 MARCH 2024





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Thank you!

#MissionOcean

#EUmissions

#HorizonEU

[Restore our Ocean and Waters \(europa.eu\)](https://europa.eu)

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